

WHAT IS CLAIMED IS:

1 1. A method comprising:
2 describing a representation of a first simulation model
3 to a graphical user interface using hardware descriptions
4 stored in a database;
5 receiving a response of the first simulation model to a
6 first signal applied to the model; and
7 subsequently describing a second simulation model to the
8 same graphical user interface.

1. 2. The method of claim 1 further comprising receiving a
2 response of the second simulation model to a second signal
3 applied to the model.

1 3. The method of claim 2 wherein describing a second
2 simulator model includes changing the hardware descriptions
3 stored in the database.

1 4. The method of claim 1 wherein the simulation model
2 represents a processor chip.

1 5. A method comprising:
2 causing functional processes to be associated with
3 respective hardware descriptions stored in a database;
4 causing the functional processes to be implemented in a
5 simulation model;
6 associating graphical user interface instructions with
7 the hardware descriptions; and
8 causing the instructions to be used to simulate a chip
9 design response on the graphical user interface.

COMPUTER SIMULATOR

1 6. The method of claim 5 including describing coupling of
2 the functional processes in a first level of hierarchical
3 relationships.

1 7. The method of claim 6 including causing the first level
2 hierarchical relationships to be combined into a second level
3 of hierarchical relationships.

1 8. The method of claim 7 further comprising repeatedly
2 causing the combining of hierarchical relationships until the
3 chip design is described.

1 9. The method of claim 5 wherein describing a second
2 simulator model includes changing the hardware descriptions
3 stored in the database.

1 10. The method of claim 5 wherein the chip design represents
2 a processor chip.

1 11. An apparatus comprising:
2 a processor coupled to a memory storing instructions that
3 cause the processor to:
4 associate functional processes with respective
5 hardware descriptions stored in a database;
6 execute the functional processes in a simulation
7 modeler;
8 associate graphical user interface instructions with
9 the hardware descriptions; and
10 use the instructions to simulate a chip design
11 response on a graphical user interface.

1 12. The apparatus of claim 11 wherein the hardware
2 descriptions describe a coupling of the functional processes
3 in a first level of hierarchical relationships.

1 13. The apparatus of claim 12 wherein the first level
2 hierarchical relationships are combined into a second level of
3 hierarchical relationships.

1 14. The apparatus of claim 13 wherein hierarchical
2 relationships are repeatedly combined until the chip design is
3 described.

1 15. The apparatus of claim 11 wherein the processor is
2 configured to change the simulation model in response to a
3 change in the hardware descriptions stored in the database.

1 16. The apparatus of claim 11 wherein the chip design
2 represents a processor chip.

1 17. An article comprising a computer-readable medium storing
2 computer-executable instructions for causing a computer system
3 to:

4 associate functional processes with respective hardware
5 descriptions stored in a database;

6 implement the functional processes in a simulation model;

7 associate graphical user interface instructions with the
8 hardware descriptions; and

9 use the instructions to simulate a chip design response
10 on the graphical user interface.

1 18. The article of claim 17 wherein the hardware descriptions
2 describe a coupling of the functional processes in a first
3 level of hierarchical relationships.

1 19. The article of claim 18 wherein the first level
2 hierarchical relationships are combined into a second level of
3 hierarchical relationships.

1 20. The article of claim 19 wherein hierarchical
2 relationships are repeatedly combined until the chip design is
3 described.

1 21. The article of claim 17 wherein the computer system is
2 configured to change the simulation model in response to a
3 change in the hardware descriptions stored in the database.

1 22. The article of claim 17 wherein the chip design
2 represents a processor chip.

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